

I. Preliminary Remarks

This response is timely filed. Should the Patent Office determine that additional fees are required for consideration of this response, permission is hereby granted to charge such fees to Deposit Account No. 033975. Any overpayments should be credited to the same account.

II. Restriction

Citing 35 U.S.C. § 121, the examiner alleged that claims 1-31 are directed to the following three distinct inventions:

Group I. Claims 1-30 (claims directed to methods of preparing a modified biological element having modified biological and/or physiochemical properties to be used in gene therapy applications);

Group II. Claim 31 (claims directed to use of a polymer-modified biological element for treatment of oil pollutants); and

Group III. Claim 31 (claim directed to use of a polymer-modified biological element for delivery of pesticides for pathogens in the agricultural industry).

III. Election

The applicants hereby elect Group I, which includes claims 1-30 directed to methods of preparing a modified biological element having modified biological and/or physiochemical properties to be used in gene therapy applications, with traverse.

IV. Traversal Arguments—Restriction of Claims 1-31 are Improper

On page 2 of the restriction requirement, the examiner alleged that the invention listed as Groups I-III do not relate to a single inventive concept because they lack a single technical feature that contributes over the prior art. Specifically, the examiner asserted that U.S. Patent No. 5,521,291 teaches the same technical feature of modifying a biological element wherein the biological element is covalently linked to a multivalent polymer via multiple covalent linkages and wherein the process of the polymer confers changed biological and/or physiochemical properties to the biological element. The applicants respectfully traverse the examiner's opinion that U.S. Patent No. 5,521,291 teaches the same single technical feature as Groups I-III, and request withdrawal of the restriction of Groups I-III.

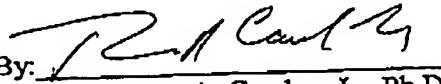
Specifically, the applicants submit that U.S. Patent No. 5,521,291 (hereafter the '291 patent) discloses antibody-polylysine-DNA complexes which are linked to the surface of the virus by the affinity of the antibody for a surface antigen on the virus, rather than by covalent linkages required by the claims of the present application. It is the polycation of the '291 patent (*i.e.*, polylysine) that is attached to the DNA and not to the virus at all. Thus the biological element (*i.e.*, the adenovirus) of the '291 patent is indirectly linked to DNA via an antibody. In contrast, the applicants' invention uses a multivalent polymer having multiple reactive groups so that the biological element is directly linked to the polymer via covalent linkages. Thus, the citation would not appear to destroy the novelty of the technical feature that links the claims of Groups I-III. Accordingly, the corresponding technical feature contributes over the prior art and the claims of Groups I-III contribute to a single general inventive concept. In view of the foregoing remarks, the applicants respectfully submit that the restriction of Groups I from Groups II and III is improper, and request rejoinder of claim 31 to claims 1-30 of Group I.

V. Conclusion

In view of the foregoing, the applicant submits that they have fully and properly responded to the outstanding restriction requirement. Should the examiner have any questions or comments regarding this response or the application, the examiner is urged to contact the undersigned at the number indicated.

Respectfully submitted,

PILLSBURY WINTHROP LLP

By: 

Thomas A. Cawley, Jr., Ph.D.
Reg. No.: 40,944
Tel. No.: (703) 905-2144
Fax No.: (703) 905-2500

TAC/PAJ
1600 Tysons Boulevard
McLean, VA 22102
(703) 905-2000

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